

WHAT IS CLAIMED IS:

1. A catalyst for purifying exhaust gases, comprising:
  - a catalyst support having tubular passages through which exhaust gases flow in an axial direction;
  - a coating layer formed on a surface of the catalyst support and composed of zeolite, refractory inorganic oxide, and a first catalyst metal loaded on a surface of the refractory inorganic oxide; and
  - a second catalyst metal loaded on a front stage part of the coating layer, which is an upstream end of the exhaust gas flow, and/or a rear stage part of the coating layer, which is a downstream end of the exhaust gas flow.
2. A catalyst for purifying exhaust gases according to claim 1, wherein axial length of said front stage part and said rear stage part are respectively one-third to one-tenth of that of said catalyst for purifying exhaust gases.
3. A catalyst for purifying exhaust gases according to claim 1, wherein said coating layer comprises:
  - a HC-adsorbing layer composed of said zeolite and formed on the surface of said catalyst support; and
  - a catalyst-contained layer composed of said refractory inorganic oxide and said first catalyst metal and formed on the HC-adsorbing layer.
4. A catalyst for purifying exhaust gases according to claim 1,

wherein said first catalyst metal comprises at least one element selected from a group consisting of Pt, Pd and Rh.

5. A catalyst for purifying exhaust gases according to claim 1, wherein said second catalyst metal comprises at least one element selected from a group consisting of Pt, Pd and Rh.

6. A catalyst for purifying exhaust gases according to claim 1, wherein said refractory inorganic oxide is alumina.

7. A catalyst for purifying exhaust gases, comprising:  
a heat-resistant catalyst support; and  
a catalytic coating layer composed of  $\beta$ -zeolite, a Ce-Zr-Y composite oxide, refractory inorganic oxide and a catalyst metal and formed on a surface of the catalyst support.

8. A catalyst for purifying exhaust gases according to claim 7, wherein said catalytic coating layer comprises:

a HC-adsorbing layer composed of said  $\beta$ -zeolite and formed on a surface of said catalyst support; and

a catalyst-contained layer composed of said Ce-Zr-Y composite oxide, said refractory inorganic oxide and said catalyst metal and formed on the HC-adsorbing layer.

9. A catalyst for purifying exhaust gases according to claim 7, wherein said catalyst metal is loaded on a surface of said refractory inorganic oxide and/or said Ce-Zr-Y composite oxide.

10. A catalyst for purifying exhaust gases according to claim 7, wherein said catalyst metal comprises at least one element selected from a group consisting of Pt, Pd and Rh.

11. A catalyst for purifying exhaust gases according to claim 7, wherein said refractory inorganic metal is alumina.